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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/768,823 | 01/25/2001 | Harlan Sexton | 50277-0459 | 2214 |

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| EXAMINER |
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CAO, DIEM K

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| ART UNIT | PAPER NUMBER |
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2126

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 09/768,823 | Applicant(s) SEXTON ET AL | |
| | Examiner Diem K Cao | Art Unit 2126 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending in the application.
2. In view of the Appeal Brief filed on 11/23/2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

3. The cross references related to the application cited in the specification must be updated (i.e. update the relevant status, with PTO serial numbers or patent numbers where appropriate) on pages 1-3.

Allowable Subject Matter

4. Claims 2-3, 5, 11-12 and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-9 and 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Steps of the method of claims 1-9 and 19 do not require use of hardware to accomplish the steps, therefore the claims are not being tangible.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 6 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (U.S. 5,870,753).

8. **As to claim 6**, Chang teaches

- when a class is activated, generating within the shorter-duration memory a class object associated with the class (If a method is invoked ... to permit object initialization; col. 13, lines 2-16, and construct proper object references for persistent object; col. 7, lines 36-37),

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- storing within the class object, data for locating instances of recreatable objects associated with the class (an object reference ... by the server; col.5, lines 6-9, and lines 40-55),
- to dereference the reference (key 78) located in the longer-duration memory (The reference data table in persistent storage 92 ... for each persistent object; col. 5, lines 44-46 col. 49-52), performing the steps of determining that the reference (key 78) located in a longer-duration memory is associated with the class (col. 10, lines 39-42), and
- using the data within the class object to locate the instance of the recreatable object (col. 13, lines 5-9 and a pointer to the memory location, the server uses the key to find the row for the object in the reference data table in memory 90; col. 5, lines 40-55).

9. **As to claim 15**, it is the same as the method claim of claim 6 except it is a computer product claim, and is rejected under the same ground of rejection of claim 6.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 4, 7-10, 13 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (U.S. 5,870,753) in view of Mueller et al. (U.S. 6,584,612 B1).

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12. As to claim 1, Chang teaches

- locating within the shorter-duration memory (memory 90 of server process; col. 5, lines 37-40), a context structure (object reference 76; col. 5, lines 49-50) associated with the call (when the server is call upon; col. 5, lines 52-54 and If a method is invoked from another process; col. 13, lines 2-4);
- locating an XREF pointers table (a reference data table; col. 5, lines 40-44) based on data cached within the context structure (object reference 76 ... in memory 90; col. 5, lines 49-52);
- determining whether the XREF pointers table includes a pointer (pointer 77 to the memory location 72; col. 5, lines 42-43) associated with the reference (key 78) located in the longer-duration memory (The reference data table in persistent storage 92 ... for each persistent object; col. 5, lines 44-46 col. 49-52); and
- if the XREF pointers table includes a pointer associated with the reference located in the longer-duration memory, then following the pointer to locate the instance within the shorter-duration memory (The reference data table ... in memory; col. 5, lines 40-55 and col. 13, lines 4-8).

13. However, Chang does not teach an XREF pointers array. Chang teaches a table contains pointer instead (See Fig. 7). Mueller teaches implementing a table or array to store information in a computer system (the utility program ... the resource length; col. 7, lines 56-61).

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14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Chang and Mueller because it shows alternative method to implement program in the software program.

15. **As to claim 4**, Chang and Mueller teach the XREF pointers array does not include a pointer associated with the reference (col. 8, lines 1-4), creating the instance by activating the recreatable object (col. 8, lines 36-44), and storing a pointer to the instance in the XREF pointers array (col. 9, lines 4-16).

16. **As to claim 7**, Chang teaches the step of storing, within the class object, data for locating instances is performed by storing, within the class object, a pointer to an XREF pointers table (col. 12, lines 53-59).

17. However, Chang does not teach an XREF pointer array. Chang teaches a table contains pointer instead (See Fig. 7). Mueller teaches implementing a table or array to store information in a computer system (the utility program ... the resource length; col. 7, lines 56-61).

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Chang and Mueller because it shows alternative method to implement program in the software program.

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19. **As to claim 8**, Chang and Mueller teach determining whether the XREF pointers array includes a pointer associated with the reference (col. 5, lines 25-30), if the XREF pointers array includes a pointer associated with the reference, then following the pointer to locate the instance within the shorter-duration memory (col. 5, lines 40-50).

20. **As to claim 9**, see rejection of claim 4 above.

21. **As to claim 10**, it is the same as the method claim of claim 1 except it is a computer product claim, and is rejected under the same ground of rejection of claim 1.

22. **As to claim 13**, see rejection of claim 4 above.

23. **As to claim 16**, see rejection of claim 7 above.

24. **As to claim 17**, see rejection of claim 8 above.

25. **As to claim 18**, see rejection of claim 4 above.

26. **As to claim 19**, Chang teaches the shorter-duration memory is shorter than the duration of the longer-duration memory (col. 5, lines 6-52).

27. **As to claim 20**, see rejection of claim 19 above.

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Response to Arguments

28. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 8:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for Patents
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Diem Cao



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